

[0171] The circuit part 50 is provided to one side of the wireless communication unit 110. The circuit part 50 is configured to electrically communicate with the second connecting wire 16 of the coaxial cable 10.

[0172] The second connecting end portion 42, the grounding part 44 and the capacitor 46 can be provided to the circuit part 50. The wire M and the grounding part 44 are connected in parallel to the second connecting end portion 42. The capacitor 46 is installed between the second connecting end portion 42 and the wire M. And, the wire M can be configured to electrically communicate with a power supply unit (e.g., the power supply unit 190) provided within the case 100X. If so, both the function of supplying power (a sort of an electric signal) and the grounding function can be simultaneously carried out via the second connecting wire 16.

[0173] The PCB part 28 is provided to one side within the case 100X. The PCB part 28 provides a space for loading parts for various operations of the communication terminal and plays a role in enabling the respective parts to electrically communicate with each other.

[0174] In the PCB part 28, the first connecting end portion 36 is provided to the second connecting portion 45. The first connecting end portion 36 is configured to electrically communicate with the first connecting wire 12 to receive an RF signal carried along the wireless communication unit 110.

[0175] Meanwhile, the circuit part 50 is provided to the second connecting end portion 42 of the PCB part 28.

[0176] The circuit part 50 is provided with the second connecting end portion 42, the grounding part 44, the capacitor 46, and the wire O. The circuit part 50 is installed in a manner that a power signal introduced via the wire M from the power supply unit is carried by the second connecting wire 16 to the wire O.

[0177] Operations of the above-configured communication terminal including the coaxial cable according to an embodiment of the present invention are explained in detail as follows.

[0178] First of all, if a user activates or turn on the power of the communication terminal, an electric signal, and more particularly, an RF signal is received by the wireless communication unit 110 of the communication terminal from an external source such as a base station or a satellite.

[0179] The RF signal received by the wireless communication unit 110 is forwarded to the PCB part 28 for a prescribed operation. In doing so, the RF signal is carried by the coaxial cable 10. In particular, the RF signal is carried by the first connecting wire 12.

[0180] In this case, the RF signal carried by the first connecting wire 12 is protected by the second connecting wire 16 of the coaxial cable 10 from being affected by an external electric wave and the like.

[0181] In particular, if the capacitor 46 is set to a prescribed value against the RF signal carried by the first connecting wire 12, the second connecting wire 16 is grounded against the first connecting wire 12 by RF. So, the second connecting wire 16 is able to play a role in preventing the external electric wave and the like from being introduced into the first connecting wire 12. Also the inner insulating layer 14 helps to insulate the first connecting wire 12 from the second connecting wire 16.

[0182] The RF signal carried by the first connecting wire 12 of the coaxial cable 10 is forwarded to a prescribed position of

the PCB part 28 to enable the appropriate part(s) of the communication terminal to operate in accordance with the forwarded signal.

[0183] Meanwhile, a power signal of the power supply unit (e.g., the power supply unit 190) is forwarded to the second connecting end portion 42 of the circuit part 50 along the wire M. The power signal forwarded to the second connecting end portion 42 is transferred along the second connecting wire 16 of the coaxial cable 10.

[0184] The power signal carried by the second connecting wire 16 of the coaxial cable 10 is forwarded to the second connecting end portion 42 of the circuit part 50 of the PCB part 28. The power signal forwarded to the second connecting end portion 42 of the circuit part 50 is transferred to a prescribed position along the wire O to supply power thereto.

[0185] Thus, the electric signal received by the wireless communication unit 110 is forwarded to the coaxial cable 10 via the first connecting portion 35. In this case, as the first connecting portion 35 is connected to the first connecting wire 12 of the coaxial cable 10, the electric signal is carried by the first connecting wire 12.

[0186] In this case, as the second connecting wire 16 of the coaxial cable 10 is grounded to the grounding part provided to the communication terminal, the electric signal carried by the first connecting wire 12 is stably forwarded to the second connecting portion 45 by being protected from external electric waves and the like, and any interference from the second connecting wire 16.

[0187] The electric signal forwarded to the second connecting portion 45 is transferred to a prescribed position of the PCB part 28 to enable the communication terminal to operate in accordance with the transferred electric signal.

[0188] The present invention can provide one or more coaxial cables described above as needed in a communication terminal. Further as a variation, more than two coaxially-disposed connecting wires may be provided in a co-axial cable. For instance, first, second and third connecting wires coaxially disposed may be provided in the coaxial cable to transmitting various different types of electrical signals. In such a case, insulating layers may be coaxially disposed between the connecting wires of the coaxial cable.

[0189] Accordingly, the present invention provides the following effects or advantages.

[0190] First of all, the present invention enables at least two kinds of electric signals to be forwarded via a coaxial cable capable of carrying one or more electric signals, thereby simplifying wires within a communication terminal.

[0191] Secondly, the present invention improves performance in cutting off certain electric waves and thus improves the overall performance of the communication terminal.

[0192] It will be apparent to those skilled in the art that various modifications and variations can be made in a communication terminal capable of performing video and/or audio communication using real-time data according to embodiments of the present invention without departing from the spirit or scope of the inventions. Thus, it is intended that the present invention covers the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

What is claimed is:

1. A communication terminal comprising:
a coaxial cable comprising:
a first connecting wire;